10 Murray–Darling Basin Commission

Outstanding assessment issues

Pricing and cost recovery: rural

Outstanding item: Assess the independent audit of cost-sharing arrangements, including the issue of transparent future asset financial management, and progress on consumption based pricing.

Next full assessment: The Council will assess rural pricing reform in 2004.

Reference: Water reform agreement, clause 3

Background

The Murray–Darling Basin Commission (MDBC) recovers the full cost of constructing, operating, maintaining and renewing assets from its member Governments. Currently, the arrangements ensure the costs borne by the States relate to the level of service received from River Murray Water, the MDBC water business. River Murray Water recovers 75 per cent of the cost of asset refurbishment and replacement from the States; the Commonwealth pays the remaining 25 per cent, whilst the States meet the full cost of operation and maintenance of assets.

In 2001 the National Competition Council identified two issues with the current MDBC approach to cost recovery and pricing, which it intended to reconsider in the 2002 NCP assessment:

- the outcomes of the independent audit of cost sharing arrangements, including the issue of transparent future asset management; and
- consumption-based pricing.

MDBC arrangements

The MDBC commissioned an independent review of pricing arrangements, which the MDBC Ministerial Council considered and endorsed in April 2002:

> …[the Ministerial Council] *endorsed in principle the findings of an Independent Review of Pricing Arrangements for River Murray Water, which assessed River Murray Water's performance against the 1995 CoAG agreement on National Competition Policy. The Independent Review found that substantial progress has been achieved through the formation of River Murray Water and the reform of cost sharing arrangements. It promotes the adoption of a renewals annuity to better reflect required pricing levels. The Council requested the Commission to prepare a detailed report for the next Council meeting on an agreed program for implementation of the findings.* (MDBC Ministerial Council 2002, p. 5)

The next Ministerial Council meeting to consider the implementation of these recommendations is scheduled for November 2002. Meanwhile, the Murray–Darling Basin Commission provided public access to the review report by posting it to its website.

The review discussed issues beyond those that the Council specifically identified for assessment this year. The Council will consider the implementation of these recommendations in full in 2004, when it will expect to see full implementation has occurred (or clear timeframes have been set for finalising any outstanding issues).

Asset planning and management

The independent review report recommended changes to the current approach to planning and financing capital investment. In particular, it found that:

- *Use of annual capital expenditure rather than a renewals annuity does not meet the CoAG Strategic Framework and the Murray–Darling Basin's Ministerial Council Reform objective of 'putting in place arrangements so that out of charges for water funds for the future maintenance, refurbishment and/or upgrading of the headworks and other structures under the Commission's control be provided.'*
- *The Murray–Darling Basin Agreement does not enable the establishment of a renewals annuity or investment or borrowing and therefore limits River Murray Water's capacity to achieve CoAG and the Ministerial Council's reform objective.*
- *The Ministerial Council should review each year:*
  - *Long-term capital requirements for River Murray Water as determined by a renewal annuity for required assets.*
  - *Opportunities for optimisation of assets to meet current and future asset requirements.*

> – *Annual capital budgets as proposed by the States and River Murray Water.*
>
> – *Annual capital requirements as determined by a renewal annuity.* (Langford and Scriven 2002, p. 4)

Consumption-based pricing

The independent pricing review concluded that the current cost-sharing arrangements developed by River Murray Water are appropriate given the MDBC's circumstances. It argued that, there would be little gain, at this stage, from moving to consumption-based pricing for River Murray Water:

> *The amount of variable costs or variations in annual diversions for States served by River Murray Water are not significant enough to derive any change in behaviour when included in a consumption–based tariff. The merit of the 70/30 split used to notionally separate fixed and variable charges is debatable as most of River Murray Water's costs are fixed. The cost sharing arrangements are based on entitlements rather than annual consumption. Over time, there would be little variation in the use of consumption rather than entitlement.* (Langford and Scriven 2002, p. 17)

It also argued, however, that further mechanisms were necessary to provide clear price signals to water users:

> - *Clear price signals will not be achieved until all costs are recognized and all subsidies and community service obligations are disclosed.*
> - *Publication of financial and pricing information for River Murray Water is the best way to provide clear price signals to water users under the present institutional arrangements.*
> - *States should disclose on a per megalitre basis the level of subsidy and/or community service obligation provided to each water business that receives bulk water from River Murray Water.* (Langford and Scriven 2002, p. 17)

This final issue is particularly important given that the States have very different policies on passing on River Murray Water costs to water users. In New South Wales and Victoria, for example, rural water users are required to pay a significant proportion of the costs passed on from River Murray Water. In contrast, South Australia does not pass on these costs to irrigators. This issue is not one for the MDBC, but the Council will need to consider it further in 2004 when assessing each State's approach to rural water pricing.

Discussion

The Council considers that the independent pricing review satisfactorily covered all the pricing issues identified for consideration in the 2002 NCP assessment. It also covers other pricing issues that the Council will consider in 2004. The Council concludes that the recommendations contained in the review, if implemented, would effectively address the issues raised in 2002. The Ministerial Council endorsed these recommendations in principle and directed the Commission to develop an implementation program. The MDBC Ministerial Council will not consider this program until November 2002 so the Council cannot yet confirm how the MDBC will implement the recommendations.

Assessment

Given that the MDBC Ministerial Council endorsed the review's recommendations, the Council is inclined to conclude that the MDBC has met its 2002 reform commitments. If, however, the MDBC decides not to adopt some recommendations, it will need to provide a clear public justification of its alternative approach and demonstrate that this alternative is consistent with its CoAG water reform commitments.

The Council will fully assess the implementation of the review recommendations in 2004. In 2003, when assessing the implementation of institutional arrangements, the Council will consider whether the MDBC Ministerial Council has endorsed the implementation of the recommendations (see the discussion on institutional arrangements).

Trade

Outstanding item: Assess progress in developing mechanisms to facilitate interstate trade.

Next full assessment: The Council will assess interstate trading in 2004.

Reference: Water reform agreement, clause 5

Background

The MDBC has been running a pilot project on interstate trading since 1998. The review of the pilot in 2000 concluded that:

- arrangements for interstate trade are improving;
- administrative arrangements are an impediment to efficient trade and need to be streamlined;

- interstate trading is increasing the value of water use in the Murray–Darling Basin;
- interstate trade had no measurable adverse social impact during the pilot;
- environmental impacts are mixed: the environmental flow impact has probably been positive, while the salinity impact is expected to be negative;
- exchange rates are poorly understood; and
- mechanisms for enforcement need to be improved.

In its 2001 NCP assessment, the Council recognised that the Murray–Darling Basin Commission’s Pilot Interstate Water Trading Project was a significant advance in interstate trade in Australia. There were constraints, however, on the expansion of the pilot to different regions and types of water right. The Council noted that it would further assess in 2002 the progress in resolving the property right issues associated with trade and developing mechanisms to facilitate interstate trade.

MDBC arrangements

The MDBC has not recently progressed the trading pilot scheme. It is focusing on developing water accounting systems to allow it to track trade, develop exchange rates along the river and between different water rights, and adjust the State caps in response to interstate trade. These efforts will allow the MDBC to extend trading across the Basin. ($500 000 has been allocated to developing the trading system.)

The MDBC Ministerial Council meeting in April 2002 noted the importance of water trading arrangements and the need for clear definitions of water property rights. The Council also noted the CoAG April 2002 decision that jurisdictions must report by September 2002 on opportunities and impediments to better define and implement water property rights regimes. This work may have an impact on the MDBC process of developing exchange rates between water rights in different States.

The Ministerial Council asked the MDBC ‘to draw upon the CoAG work as it relates to Basin water recovery matters’. It also asked the MDBC ‘to accelerate its own work on the development of water trading arrangements and related property rights in the Basin, including water trading rules that take full account of the environmental impacts of such trade’ (MDBC Ministerial Council 2002).

Discussion

There has been little practical progress in water trading since the Council's 2001 NCP assessment, but the MDBC has now committed at the Ministerial Council level to adopt comprehensive interstate water trading and placed priority on implementing trading arrangements. The Council considers that full interstate trading should be implemented as soon as possible and that the systems that support trading should be efficient and effective. An efficient and effective trading system needs to: allow for trading between different water rights in different States; account for the environmental consequences of trade; and facilitate timely trading, including providing access to State-based water registry information in a way that facilitates interstate trades.

In its 2001 NCP assessment, the Council discussed the importance of effective property rights registers. These registers are currently State based. Consequently, an issue is how those interested in interstate trading can readily access the consolidated information they need to conduct such trades, when currently the various State systems are not coordinated.

Assessment

The Council concludes that the MDBC has met its 2002 commitments. It expects, however, significant progress in the development and implementation of trading arrangements between now and its full assessment of interstate trading in 2004. In 2003, the Council will provide a progress report on this implementation.

Over the next two years, the Council expects the MDBC to establish:

- a system of exchange rates to allow for trading between regions and between different water rights in different States;
- adequate environmental controls to ensure water trading does not result in environmental degradation;
- efficient administrative arrangements for processing and approving trades; and
- a system to provide access to State-based registry systems which enables those interested in interstate trading to obtain the information they need to conduct such trades.

Progress report issues

Institutional reform: structural separation

Progress report: Reporting on the MDBC's completion of the independent pricing audit, the Ministerial Council's response to the audit and the availability of sufficient information to stakeholders to understand the audit's recommendations.

Next full assessment: The Council will assess institutional reform in 2003.

Reference: Water reform agreement, clause 6

Background

The Council noted concerns in 2001 that the MDBC's approach to price setting did not provide the transparency necessary to analyse River Murray Water's prices and give stakeholders confidence in the rigor and objectivity of price-setting arrangements. One key initiative by the MDBC to address these issues was the independent pricing review. The Council noted that it would monitor in 2002:

- the completion of the independent pricing review;
- the Ministerial Council's response to that review; and
- whether sufficient information is available to stakeholders to understand the review's recommendations.

One obvious mechanism for ensuring stakeholders have access to sufficient information on the pricing review is to make the review report public. The Council also noted that it would examine the transparency of reporting of River Murray Water's accounts.

MDBC progress

Progress on implementing the independent pricing review report to the Murray–Darling Basin Ministerial Council was discussed in detail in the previous section on rural pricing and cost recovery. The Council has been advised that the Murray–Darling Basin Commission has made the review report public through its website together with a note describing its status as a report received and endorsed in principle by the Ministerial Council and whose implementation will be the subject of a further report by the Commission to the Ministerial Council in November 2002.

While River Murray Water provides separate accounts to the owners of its water business (the Commonwealth, New South Wales, Victoria, and South Australia), it has not previously reported these separate accounts publicly.

Following the independent pricing review the Commission will now include in its annual report a supplementary note reporting, in relation to River Murray Water activities, the annual cost shares met by each Government and the corresponding bulk water volumes supplied to each State.

Water allocations and the environment

Progress report: Reporting on Murray–Darling Basin States' compliance with the MDBC cap on water diversions

Next full assessment: The Council will assess allocations for the environment in 2004 and provide a stocktake of progress to identify remaining areas for assessment in 2005.

Reference: Water reform agreement, clause 4(b–f)

Background

The cap on diversions from the basin continues to make an important contribution to ensuring environmental flows in the river system. The primary objectives of the cap are to maintain and, where appropriate, improve existing flow regimes, to protect and enhance the riverine environment, and to achieve sustainable consumptive use by developing and managing basin water resources to meet ecological, commercial and social needs.

The MDBC Ministerial Council formally adopted the cap in August 2000 as part of the Murray–Darling Basin Agreement. The cap is legally enforceable. Under the Agreement, States' water allocations are independently audited each year and any breaches of the cap are declared by the MDBC and referred to the Ministerial Council. The Council reported in 2001 on 1999-2000 cap implementation.

The cap sets an upper limit on the amount of water that can be taken from the river system. It is equal to the volume of water that would have been diverted under 1993-94 levels of development. In unregulated rivers, the cap may be defined as an end-of-valley flow.

Submission

The Council received a submission from Mr Robert Caldwell, an irrigator in the Lachlan Valley, concerning the MDBC cap for the Lachlan. He argued that the average cap of 250 gigalitres for the Lachlan river is inappropriate and that 500–620 gigalitres is more indicative of the Lachlan's developmental needs (Caldwell 2002, submission 5).

MDBC progress

The Independent Audit Group's 2000-01 review of cap implementation (MDBC 2002) has been completed.

The transparency in reporting on cap compliance is resulting in pressure on those communities that are over the cap, along with their governments. When assessing individual compliance with the cap, the Council will continue to raise the review concerns with jurisdictions. The Council will consider the case for recommending reductions in competition payments where jurisdictions persistently breach the cap and does not rectify those breaches in later years. The key issue for cap compliance is not so much whether a region breaches the cap in any one year, but whether the cap is breached two to three years running. This indicates that a region and its government are not addressing overuse of water or are not committed to compliance with the cap.

The following are the main findings of the Independent Audit Group.

- Queensland has yet to complete its water resource planning process, which will define the cap in Queensland, although the moratorium on the construction of works has slowed water use development.

- Diversions in the ACT were within the cap recommended for that jurisdiction, but the ACT has yet to agreed on the cap. A necessary condition for agreement is the finalisation of trading rules for the Murrumbidgee river.

- Jurisdictions are to report to the MDBC on a number of implementation issues raised in the IAG report, including the audit and approval of valley models, the development of quality management systems for diversion data and the resolution of the rules for water trading. Basin-wide accounting for environmental flows, akin to the consumption cap at the moment, is proposed.

- For New South Wales, the long term diversion cap has been exceeded in the Namoi Valley, the Barwon/Darling/Lower Darling Valleys and the Lachlan Valley. New South Wales is to address this issue and report to the next MDBC Ministerial Council meeting on action taken to bring diversions into balance, including the period over which this correction will occur.

The cap is an essential first step in establishing management systems to achieve healthy rivers and sustainable consumptive uses. It represents a balance between the significant economic and social benefits that have been obtained from developing the basin's water resources on one hand and seeking to improve the environmental health of the river system on the other.

Provision for the environment

Progress report: Reporting on the MDBC project on *environmental flows and water quality objectives for the River Murray*, which aims to establish water quality and environmental flow objectives and a flow regime to achieve them.

Given the national significance of this issue, the Council will report on further developments in 2002 and will look for tangible progress in this area in future assessments.

Next full assessment: The Council will assess allocations for the environment in 2004 and provide a stocktake of progress to identify remaining areas for assessment in 2005.

Reference: Water reform agreement, clause 4(b–f)

Background

In 2001, the 'Save the Murray' campaign against environmental degradation received national media prominence. The River Murray is now at a point where the level of diversions has significantly reduced flows in the lower Murray. The reduction in flow has most notably affected small to medium-sized flood events. The frequency of these floods has been substantially reduced and many now are completely harvested. Consequently, the lower reaches of the Murray now experience severe drought-like flows in over 60 per cent of years, compared with 5 per cent of years under natural conditions.

The changes to the flow regime have had a significant impact on river health, including a contraction in the area of heavy wetlands, a fall in native fish numbers, rising salinity levels and an increase in the frequency of algal blooms. A number of Ramsar wetlands[1] are under threat. These wetlands on the River Murray system are important bird breeding and refuge areas, and may contain other significant fauna and flora. Numerous other wetlands of national importance are associated with the River Murray system and would be subject to flow-related stresses similar to those on the Ramsar wetlands.

The MDBC is committed to providing environmental flows as opportunities arise and according to the best scientific advice on potential outcomes. Environmental flows in the Murray–Darling Basin are not only a matter for the MDBC; properly implemented, the bulk entitlements policy of Victoria, the water sharing plans of New South Wales and Queensland's progress on the Condamine–Balonne water resource plan will achieve environmental allocations and contribute to better outcomes for the River Murray.

The Council recognises that the complexity of the issues, as well as the number of governments involved, has led to progress being slow. Given the national significance of this issue, however, the Council will look for tangible progress in later NCP assessments.

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1 The RAMSAR wetlands are those listed under the 1971 Convention on Wetlands as wetlands of international importance.

All State governments committed to the 1994 CoAG water reform agreement and to the NCP agreements in 1995 that required national water reform. In 1999, the tripartite meeting agreed that allocation programs to address all river and groundwater systems that are overallocated or stressed should be substantially complete by 2005. The River Murray is the nation's largest stressed resource and needs to be treated like all other stressed river systems.

The Council expects, therefore, that an agreement and implementation of environmental allocations for the River Murray will be in place by 2005. The MDBC Ministerial Council's decision at its October 2003 meeting on flow options for the River Murray should provide a timeframe (with milestones) in which to deliver environmental flows based on scientific evidence. Public consultation on this issue will be considered as part of the 2004 NCP assessment.

MDBC progress

Environmental flows for the River Murray

The Ministerial Council meeting in April 2002:

- approved a $150 million package over seven years to make structural and operational changes to improve weirs and channels, a native fish strategy to boost six-fold the levels of native fish, and investigations to make the best use of the water currently available to the environment of the River Murray. The Commonwealth, New South Wales, Victoria and South Australia are expected to each contribute 25 per cent of these funds;
- directed the Commission to use three reference points – 350, 750 and 1500 gigalitres[2], returned to the River Murray – as the basis for analysis and community engagement in flow restoration;
- agreed to a community engagement commencing on 1 July 2002;
- agreed to a comprehensive analysis of these economic and social options, and environmental impacts of providing environmental flows. It will research environmental management outcomes because there is a need to actively manage the environment and to convince the community that the scenarios will produce tangible environmental outcomes; and

[2] The three scenarios include the 70 gigalitres already identified as the River Murray's share of the planned recovery of 210 gigalitres of environmental water under the Snowy River initiative.

- indicated a desire to make a final decision on an environmental flow regime for the River Murray on the basis of the above work, in October 2003.

These initiatives are additional to those regarding fish passage, salt interception works and improved wetland health which were reported in the 2001 NCP assessment. They will result in improved management of floodplain health, fish, the Murray mouth, and the Coorong and Lower lakes, and the establishment of water quality objectives.

Under the terms of the Ministerial Council decisions, the MDBC will develop a business case for the recovery of 350, 750 or 1500 gigalitres of environmental flows for the River Murray. The development of the plan will consider issues of equity, property rights and water trading. A Jurisdictional Reference Panel comprised of all MDBC States developed the three recovery options. The MDBC will also examine local and system-wide environmental problems and benefits for the Murray mouth, the Coorong wetlands, the Chowilla floodplain, the Gunbower–Perricoota and Barmah–Millewa forests, and Murray cod. A reduction in consumptive use of 750 gigalitres would equate to about 10 per cent of allocation and 7 per cent of use. It would increase the median flow at the river mouth by about 20–25 per cent to a total of 35 per cent of the river's median natural flow. Restoration of 1500 gigalitres is equivalent to a 20 per cent reduction in the cap.

In deciding to proceed with consultation on the three environmental flow options, the Ministerial Council effectively ruled out the 'no allocation' option. The MDBC therefore has to plan structural and operational changes for each scenario. It has already agreed to establish a river accounting system for environmental water and to appoint a River Murray Environmental Manager.

The complexity of the environmental flows issue and the need for certainty in the communities relying on irrigated agriculture have been recognised. The MDBC Ministerial Council therefore agreed to establish an intensive community engagement strategy (commencing 1 July 2002) to incorporate community values and scientific and technical knowledge in developing options for the recovery of water for the environment. This Strategy will include a river reach and a basin-wide approach, with input from local stakeholders, regions and the general community. Approaches will seek to maximise benefits and minimise costs to water users.

The increase in environmental allocations to be agreed on will be based on the 1993-94 levels of use for Victoria, New South Wales and South Australia. Reductions in water allocations may not be uniform across all water users, because greater savings in some regions may be necessary to achieve the desired environmental outcomes. New water sharing arrangements are approaching completion in New South Wales and Queensland. Further water made available to the River Murray environment as a result of these plans will be counted as part of those States' contributions.

Native fish strategy

The health of native fish species in the Murray–Darling Basin is an indicator of the overall health of the basin and its rivers. River regulation to provide water on demand through dams, weirs and diversions has changed the natural flooding and drying cycles of the river systems, affecting the health of river habitats and native fish populations. Native fish populations are now at an estimated 10 per cent of pre-European levels and are likely to decline to 5 per cent unless intervention occurs.

The Ministerial Council endorsed a draft native fish strategy and has released the strategy for six months of public consultation. The strategy has the goal of rehabilitating native fish communities in the Murray–Darling Basin (back to 60 per cent of their estimated pre-European settlement levels) over 50 years. The Strategy will involve action to rehabilitate and protect fish habitats, manage riverine structures, control alien fish species, protect threatened native fish species and manage fish translocation and stocks. It is based on the notion that environmental flows are critical to the rehabilitation of native fish populations.

The MDBC Ministerial Council agreed to invest in 'daughterless carp' technology that has the prospect of reducing European carp impacts dramatically over 20–30 years. The MDBC will work with CSIRO Marine Science to carefully evaluate the potential for this technology and plan for its implementation.

Submissions

The Council has received a number of submissions that raise MDBC issues. Environment Victoria argues that the Victorian Government is not prepared to deliver environmental flows to the Murray by 2005 and that 1000 gigalitres is the bare minimum needed (Environment Victoria 2002, submission 2). The New South Wales Irrigators Council is concerned with the MDBC project to increase environmental flows, arguing that:

- there was insufficient consultation before the development of the three scenarios for increasing environmental water allocations;
- the process has excluded widespread consultation, so irrigators have no ownership of the process and have not been involved with the appointment of members of the Community Reference Panel;
- supporting documentation (including scientific and economic studies) are not publicly available and have not been subjected to peer review;
- irrigators are seeking informed debate and call for:
  - a decision-making framework that actively includes the irrigation community, provides timely and comprehensive information, and

allows the community to develop, evaluate and agree to preferred options;

- a review of the benefits of the MDBC cap and environmental flow rules; and

- equality between the States in whatever solutions are reached;

- the focus on the Murray mouth has been an oversimplified way of delivering political messages that have no environmental impacts; and

- investigations have been limited to scoping reports for what is the biggest decision ever to affect Murray–Darling Basin regional communities. While the issue of compensation for lost water has been tabled for consideration, the scope of the research has been narrow. A comprehensive socioeconomic analysis incorporating regional impacts is needed (NSWIC 2002, submission 12).